

residues 201-205 of the identical chain or an amino acid sequence starting between residues 79-110 of the MSP  $\alpha$  chain (SEQ ID NO:20) and ending between residues 186-190 of the identical chain;

K2 comprises an amino acid sequence starting between residues 202-206 of HGF  $\alpha$  chain (SEQ ID NO:18) and ending between residues 283-299 of the identical chain or an amino acid sequence starting between residues 187-191 of MSP  $\alpha$  chain (SEQ ID NO:20) and ending between residues 268-282 of the identical chain;

m and n are 0 or 1;

B is the sequence  $[(X)_q Y]_r$ , wherein X = Gly and Y = Ser, or Cys, or Met, or Ala;

q is an integer from 2 to 8;

r is an integer from 1 to 9;

[C] corresponds to the sequence HL-K1-(K2)<sub>s</sub>,

wherein HL, K1, and K2 are as defined above,

s is 0 or 1;

D is the sequence W-Z, wherein W is a conventional proteolytic site, Z is any tag sequence useful for the purification and detection of the protein; and y is 0 or 1.

**Claim 2. (Twice Amended)** The recombinant protein according to claim 1, wherein:

HL comprises amino acids 32 to 127 of the HGF  $\alpha$  chain (SEQ ID NO:18), or amino acids 19 to 98 of the MPS  $\alpha$  chain (SEQ ID NO:20);

K1 comprises amino acids 128 to 203 of the HGF  $\alpha$  chain (SEQ ID NO:18), or amino acids 99 to 188 of the MPS  $\alpha$  chain (SEQ ID NO:20);  
and

K2 comprises amino acids 204 to 294 of the HGF  $\alpha$  chain (SEQ ID NO:18), or amino acids 189 to 274 of the MPS  $\alpha$  chain (SEQ ID NO:20).

**Claim 3. (Twice Amended)** The recombinant protein according to claim 1 of formula (II):

LS<sub>MSP</sub>-HL<sub>MSP</sub>-K1<sub>MSP</sub>-K2<sub>MSP</sub>-L-HL<sub>HGF</sub>-K1<sub>HGF</sub>-K2<sub>HGF</sub>-D (II)

wherein LS<sub>MSP</sub> comprises amino acids 1-18 of MSP (SEQ ID NO:20), HL<sub>MSP</sub> comprises amino acids 19-56 of MSP (SEQ ID NO:20), K1<sub>MSP</sub> comprises amino acids 99-188 of MSP (SEQ ID NO:20), K2<sub>MSP</sub> comprises amino acids 189-274 of MSP, HL<sub>HGF</sub> comprises amino acids 32-127 of HGF, K1<sub>HGF</sub> comprises amino acids 128-203 of HGF, K2<sub>HGF</sub> comprises amino acids 204-294 of HGF, L comprises the sequence (Gly<sub>4</sub>Ser)<sub>3</sub>, D comprises the sequence Asp<sub>4</sub>-His<sub>6</sub>.

**Claim 10. (Twice Amended)** A therapeutic agent comprising the recombinant protein of claim 1.

<sup>5</sup>  
Claim ~~13~~. (Twice Amended) A pharmaceutical composition

C<sup>4</sup> comprising an effective amount of the recombinant protein of claim  
1 in combination with pharmacologically acceptable excipients.

[ Attached hereto is a marked up version showing the changes  
made to the application by this Amendment.